



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460**

**OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES**

July 22, 2004

Memorandum

Subject: "Potential Risks of Nine Rodenticides to Birds and Nontarget Mammals: A Comparative Approach"; revised document dated July 2004

To: Susan Lewis, Branch Chief
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Through: Tom Bailey, Branch Chief
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Attached is EFED's revised ecological risk assessment entitled "Potential Risks of Nine Rodenticides to Birds and Nontarget Mammals: A Comparative Approach" dated July 2004. The assessment evaluates and compares potential primary and secondary risks of brodifacoum, difethialone, bromadiolone, chlorophacinone, diphacinone, warfarin, zinc phosphide, bromethalin, and cholecalciferol. All nine rodenticides are registered for control of commensal rats and mice. Zinc phosphide, chlorophacinone, and diphacinone also are registered for controlling a variety of rodent and other small mammalian pests in field settings. The assessment was revised after EFED received and addressed public comments on the previous version of the comparative risk assessment and upon receipt of additional data and incident reports.

The revisions in the revised assessment of July 2004 include the following:

- addition of rat dietary data (LC50s) for 5 of the anticoagulant rodenticides
- calculation of mammalian RQs based on the additional rat dietary data
- an added section and appendix on endangered species considerations, based on the U. S. Fish and Wildlife Service's 1993 Biological Opinion for vertebrate control agents
- addition of diphacinone residue data from a field study
- additional residue and nontarget data for chlorophacinone and diphacinone from a field study conducted on ground squirrels in California rangeland
- inclusion of additional rodenticide incidents recently submitted to EFED, including anticoagulant-residue data from endangered kit foxes in California
- rearrangement of some of the hazards and risk information in the text for clarity
- inclusion of 40 CFR study guideline reference numbers where guideline studies are cited in the "*Terms and definitions*" section
- reference to pet incident data compiled for rodenticides by the ASPCA Animal Poison Control Center
- inclusion of some additional secondary-toxicity information for chlorophacinone